ORDINANCE NO. XXXX, NEW SERIES

AN ORDINANCE OF THE CITY OF MORGAN HILL ADDING CHAPTER 15.62 (ELECTRIC VEHICLE INFRASTRUCTURE) TO TITLE 15 (BUILDINGS AND CONSTRUCTION) TO THE MORGAN HILL MUNICIPAL CODE REQUIRING THE ADDITION OF ELECTRIC VEHICLE INFRASTRUCTURE FOR PARKING THAT SERVES NEWLY CONSTRUCTED AND EXISTING BUILDINGS

THE CITY COUNCIL OF THE CITY OF MORGAN HILL DOES ORDAIN AS FOLLOWS:

Section 1: Chapter 15.62 of the Morgan Hill Municipal Code is hereby added to read as follows:

Chapter 15.62

ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

Sections:

15.62.010 Findings and Purpose.

15.62.020 Applicability.

15.62.030 Exceptions.

15.62.040 Definitions.

15.62.050 Residential Mandatory Measures.

15.62.060 Other Mandatory Measures.

15.62.070 Direct Current Fast Charging Stations.

15.62.010 - Findings and Purpose.

The Council finds and expressly declares as follows:

- A. Scientific evidence has established that the burning of fossil fuels, including gasoline and diesel used for transportation, is the largest contributor to greenhouse gas emissions emitted. Burning fossil fuels like gasoline and diesel releases significant amounts of greenhouse gas emissions into the air which contributes to global warming and climate change.
- B. The following addition to the Morgan Hill Municipal Code is reasonably necessary because of local climatic, geologic and topographical conditions as listed below:
 - (1) Morgan Hill is situated along a wildland-urban interface and is extremely vulnerable to wildfires and firestorms, and human activities releasing

- greenhouse gases into the atmosphere cause increases in worldwide average temperature, drought conditions, vegetative fuel, and length of fire seasons.
- (2) Morgan Hill relies on water imported into the region for groundwater recharge and climate change is already causing changes in rainfall and snowfall which threaten to interrupt the supply of imported water.
- C. The following addition to the Morgan Hill Municipal Code is also reasonably necessary because of health and safety concerns as Morgan Hill residents suffer from asthma and other health conditions associated with poor air quality exacerbated by smog from cars.
- D. Electric vehicles are linked to lower greenhouse gas emissions and is cost competitive because of the cost savings associated with electric vehicle designs that avoid the use of gasoline.
- E. Use of electric vehicles benefit the health, welfare, and resiliency of Morgan Hill and its residents.
- F. The most cost-effective time to integrate electrical infrastructure for electric vehicle charging is in the design phase of a project because electrical systems can be designed to accommodate power needs.
- G. It is the intent of the council to create abundant and accessible charging opportunities as a way to encourage the use of electric vehicles over traditional gasoline driven vehicles.

15.62.020 - Applicability.

The requirements of this Chapter shall apply to all parking that will serve newly constructed buildings proposed to be located in whole or in part within the City, and also for parking that will serve existing buildings as described, except that the provisions of this Chapter will not apply to any project for which a complete development application has been submitted.

15.62.030 - Exceptions.

- A. It may be determined that the requirements of this Chapter do not apply on a case-bycase basis where the City of Morgan Hill has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
 - (1) Where there is no local utility power supply or the local utility is unable to supply adequate power.
 - (2) Where there is evidence suitable to the City of Morgan Hill substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Chapter 15.62 may increase construction cost by an average of \$4,500 per parking space for market rate housing or for any non-residential

- development, or by \$400 per parking space for Affordable Housing. EV infrastructure shall be provided up to the level that would not exceed this cost for utility service, after including all applicable subsidies, grants, or rebates.
- B. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities and without electrical panel upgrade or new panel installation. Note that detached ADUs, attached ADUs, and JADUs without additional parking but with electrical panel upgrades or new panels do not qualify for an exception and must have reserved breakers and electrical capacity according to the requirements of 15.62.050(A).

15.62.040 - Definitions.

- A. "Affordable Housing" means residential buildings that entirely consist of units below market rate and whose rents or sales prices are governed by local agencies to be affordable based on area median income.
- B. "Automatic Load Management System (ALMS)" shall mean a control system designed to manage load across one or more electric vehicle supply equipment (EVSE), circuits, panels and to share electrical capacity and/or automatically manage power at each connection point. Unless otherwise noted, ALMS systems shall be designed to deliver no less than 3.3 kVa (208/240 volt, 16-ampere) to each EV Capable, EV Ready or EVCS space served by the ALMS, and meet the requirements of California Electrical Code.
- C. "Direct Current Fast Charging (DCFC)" shall mean a parking space provided with electrical infrastructure that meets the following conditions:
 - 1. A minimum of 48 kVa (480 volt, 100-ampere) capacity wiring.
 - 2. Electric vehicle supply equipment (EVSE) located within three (3) feet of the parking space providing a minimum capacity of 80-ampere.
- D. "Electric Vehicle (EV) Capable Space" means a vehicle space with electrical panel space and load capacity to support a branch circuit and necessary raceways, to support EV charging.
- E. "Electric Vehicle Charging Station (EVCS)" means a parking space that includes installation of electric vehicle supply equipment (EVSE) at an EV Ready space. An EVCS space may be used to satisfy EV Ready space requirements. EVSE shall be installed in accordance with the California Electrical Code.
- F. "Electric Vehicle (EV) Ready Space" means a vehicle space which is provided with a branch circuit and any necessary raceways terminating in a receptacle or a charger.
- G. "Electric Vehicle Supply Equipment (EVSE)" shall mean the conductors, including the ungrounded, grounded and equipment grounding conductors and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or

- apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.
- H. "Level 2 EV Capable" means a parking space provided with electrical infrastructure that meets the following requirements:
 - 1. Conduit that links a listed electrical panel with sufficient capacity to a junction box or receptacle located within three (3) feet of the parking space.
 - 2. The conduit shall be designed to accommodate at least 8.3 kVa (208/240 volt, 40-ampere) per parking space. Conduit shall have a minimum nominal trade size of 1 inch inside diameter and may be sized for multiple circuits as allowed by the California Electrical Code. Conduit shall be installed at a minimum in spaces that will be inaccessible after construction, either trenched underground or where penetrations to walls, floors, or other partitions would otherwise be required for future installation of branch circuits, and such additional elements deemed necessary by the Building Official. Construction documents shall indicate future completion of conduit from the panel to the parking space, via the installed inaccessible conduit.
 - 3. The electrical panel shall reserve a space for a 40-ampere overcurrent protective device space(s) for EV charging, labeled in the panel directory as "EV Capable."
 - 4. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.
 - 5. The parking space shall contain signage with at least a 12" font adjacent to the parking space indicating the space is EV Capable.
- I. "Level 1 EV Ready" shall mean a parking space that is served by a complete electric circuit with the following requirements:
 - 1. A minimum of 2.2 kVa (110/120 volt, 20-ampere) capacity wiring.
 - 2. A receptacle labeled "Electric Vehicle Outlet" or electric vehicle supply equipment located within three (3) feet of the parking space. If EVSE is provided the minimum capacity of the EVSE shall be 16-ampere.
 - 3. Conduit oversized to accommodate future Level 2 EV Ready (208/240 volt, 40-ampere) at each parking space.
- J. "Level 2 EV Ready" shall mean a parking space that is served by a complete electric circuit with the following requirements:
 - 1. A minimum of 8.3 kVa (208/240 volt, 40-ampere) capacity wiring.
 - A receptacle labeled "Electric Vehicle Outlet" or electric vehicle supply
 equipment located within three (3) feet of the parking space. If EVSE is provided

the minimum capacity of the EVSE shall be 30-ampere.

- K. "Low Power Level 2 EV Ready" shall mean a parking space that is served by a complete electric circuit with the following requirements:
 - 1. A minimum of 4.1 kVA (208/240 Volt, 20-ampere) capacity wiring.
 - 2. A receptacle labeled "Electric Vehicle Outlet" or electric vehicle supply equipment located within three (3) feet of the parking space. If EVSE is provided the minimum capacity of the EVSE shall be 16-ampere.
 - 3. Conduit oversized to accommodate future Level 2 EV Ready (208/240 volt, 40-ampere) at each parking space.
- L. "Multifamily Dwelling" or "Multifamily" means a building that contains three or more dwelling units, with each unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation. Includes multi-family senior housing limited to occupancy by persons fifty-five years of age or older for residents who are independent and do not require assistance with everyday living ("independent living").
- M. "Office Building" means a place of employment occupied by businesses providing professional, executive, management, or administrative services.

15.62.050 – Minimum Parking Spaces

All electric vehicle (EV) spaces shall count toward the minimum required parking spaces. Where two or more primary uses occupy a single site, the EV infrastructure required for each use shall be calculated separately. Calculations for the required minimum number spaces with EV infrastructure shall be rounded up to the nearest whole number. Requirements represent the minimum charging infrastructure required, and increases in installed infrastructure, such as EV Supply Equipment and delivered power, shall be permissible.

15.62.060 - Residential Mandatory Measures.

- A. Parking Provided for Residential Occupancy Units with Private Dedicated Garages.
 - New Construction. One parking space provided in the garages shall be a Level 2 EV Ready space. If a second parking space is provided, it shall be provided with a Level 1 EV Ready space.
 - 2. **Existing Buildings at Retrofit.** Parking additions to new or expanded garages or electrical panel upgrades must have reserved breaker spaces to accommodate parking per the requirements of 15.62.50(A)(1).
- B. Parking Provided for Multifamily Residential Occupancy Shared Parking Facilities. These requirements apply to parking spaces that are assigned or leased to individual dwelling units, as well as unassigned residential parking. The total number of EV

charging spaces shall be one-hundred percent (100%) of dwelling units or one-hundred percent (100%) of residential parking spaces, whichever is less. Visitor parking is not included.

- 1. **New Construction.** Forty percent (40%) of parking spaces shall be EVCS with Level 2 EV Ready. Sixty percent (60%) of parking spaces shall be provided with at minimum a Level 1 EV Ready space. ALMS shall be permitted to reduce load when multiple vehicles are charging.
- 2. Existing Buildings at Retrofit. When a Building Permit is required for a retrofit project at a multifamily complex and the construction valuation exceeds \$1,000,000 then either thirty percent (30%) of the total number of parking spaces shall be upgraded to EVCS or ten percent (10%) of the cost of the retrofit shall be spent toward meeting that goal, whichever costs less. When new parking facilities are added and ALMS is installed, the ALMS system shall be designed to deliver no less than 2.2 kVa (110/120 volt, 20-ampere).

15.62.070 - Other Mandatory Measures.

- A. Parking Provided for Office Buildings New Construction
 - 1. Twenty percent (20%) of parking spaces shall be EVCS with Level 2 EV Ready. ALMS shall be permitted to reduce load when multiple vehicles are charging.
 - 2. Thirty percent (30%) of parking spaces provided shall be Level 2 EV Capable.
- B. Parking Provided for Hotel and Motel Occupancies New Construction
 - Ten percent (10%) of parking spaces provided shall be EVCS with Level 2 EV Ready. ALMS shall be permitted to reduce load when multiple vehicles are charging.
 - 2. Twenty-five percent (25%) of parking spaces provided shall be Low Power Level 2 EV Ready space.
 - 3. Ten percent (10%) of parking spaces provided shall be Level 2 EV Capable.
- C. Parking Provided for All Other Nonresidential Occupancies New Construction
 - Ten percent (10%) of parking spaces provided shall be EVCS with Level 2 EV Ready. ALMS shall be permitted to reduce load when multiple vehicles are charging.
 - 2. Ten percent (10%) of parking spaces provided shall be Level 2 EV Capable.
- D. Parking Provided for Existing Office, Hotel and Motels, and all Other Nonresidential Occupancies at Retrofit.
 - 1. When a Building Permit is required and the valuation exceeds \$1,000,000 then either ten percent (10%) of the total number of regular parking spaces shall be upgraded to EVCS or ten percent (10%) of the cost of the retrofit shall be spent toward meeting that goal, whichever costs less.

15.62.080 - Direct Current Fast Charging Stations.

One Direct Current Fast Charging Station (DCFC) may be substituted for up to five (5) EVCS to meet the requirements of sections 15.62.050 and 15.62.060. Where ALMS serve DCFC stations, the power demand from the DCFC shall be prioritized above Level 1 and Level 2 spaces.

Section 2. This Ordinance shall be submitted to the California Building Standards Commission following adoption as consistent with state law.

<u>Section 3.</u> Severability. Should any provision of this ordinance be deemed unconstitutional or unenforceable by a court of competent jurisdiction, such provision shall be severed from the ordinance, and such severance shall not affect the remainder of the ordinance.

<u>Section 4.</u> This Ordinance shall take effect on July 1, 2023. The City Clerk is hereby directed to publish this Ordinance or a summary thereof pursuant to Government Code Section 36933.

THE FOREGOING ORDINANCE WAS INTRODUCED AT A MEETING OF THE CITY COUNCIL HELD ON THE 16th DAY OF NOVEMBER 2022, AND WAS FINALLY ADOPTED AT A MEETING OF THE CITY COUNCIL HELD ON THE 7th DAY OF DECEMBER 2022, AND SAID ORDINANCE WAS DULY PASSED AND ADOPTED IN ACCORDANCE WITH LAW BY THE FOLLOWING VOTE:

AYES: COUNCIL MEMBERS: NOES: COUNCIL MEMBERS: ABSTAIN: COUNCIL MEMBERS: ABSENT: COUNCIL MEMBERS:

APPROVED: ATTEST:

RICH CONSTANTINE, Mayor MICHELLE BIGELOW, City Clerk

CERTIFICATE OF THE CITY CLERK 2

I, MICHELLE BIGELOW, CITY CLERK OF THE CITY OF MORGAN HILL, CALIFORNIA, do hereby certify that the foregoing is a true and correct copy of Ordinance No. XX, New Series, adopted by the City Council of the City of Morgan Hill, California at their regular meeting held on the 7th day of December 2022.